

University of Montana

ScholarWorks at University of Montana

Syllabi

Course Syllabi

Fall 9-1-2001

FOR 503.02: GIS - Methods and Applications I

Hans R. Zuuring

University of Montana, Missoula

Follow this and additional works at: <https://scholarworks.umt.edu/syllabi>

Let us know how access to this document benefits you.

Recommended Citation

Zuuring, Hans R., "FOR 503.02: GIS - Methods and Applications I" (2001). *Syllabi*. 6289.

<https://scholarworks.umt.edu/syllabi/6289>

This Syllabus is brought to you for free and open access by the Course Syllabi at ScholarWorks at University of Montana. It has been accepted for inclusion in Syllabi by an authorized administrator of ScholarWorks at University of Montana. For more information, please contact scholarworks@mso.umt.edu.

--

METHODS & APPLICATIONS I

MEETINGS: Section 1 => TueThu 2:10 - 4:00 pm
Section 2 => TueThu 4:40 - 6:30 pm

LOCATION: Jour Rm. 106 forestry computer lab

TEXT: Burrough, P.A. and R.A. McDonnell. 1998. Principles of Geographical Information Systems, Oxford University Press, New York. 333 p.

OBJECTIVES:

1. Become familiar with GIS technology through the introduction of various concepts such as map projections and datums, data acquisition, editing and maintenance, vector and raster data types, database management systems, 2D and 3D spatial analyses, spatial statistics, error propagation and data visualization.
2. Acquire "hands-on" experience through the use of self-paced tutorials and associated exercises with the
 - a) INTERNET and the WWW
 - b) PCRaster
 - c) MAPINFO, a desktop mapping package
 - d) ArcGIS, a suite of widely-used popular commercial GIS programs
3. Become familiar with EXCEL, formulas and graphing in a spreadsheet environment and FOXPRO, a RDBMS.
4. Perform various spatial analyses and explore the capabilities of GIS to serve as a decision-making and planning tool for natural resources management.

GRADING:

Submitted Study Questions from GIS Notes **25%**
Class Assignments (11 of them) **75%**

INSTRUCTOR

Name: Hans Zuuring

Office: Forestry 304

Hours: By appointment only!

Phone: 243-6456 (Office) 721-2586 (Home)

******* TOPICS / EVENTS *******

- A. GIS NOTES on WWW - ten parts to be completed and submitted over the course of five weeks according to the following schedule:

<u>Item</u>	<u>Due Date</u>
Parts 1 & 2	Thur Sept 13 @ 6 pm
Parts 3 & 4	Thur Sept 20 @ 6 pm
Parts 5 & 6	Thur Sept 27 @ 6 pm
Parts 7 & 8	Thur Oct 4 @ 6 pm
Parts 9 & 10	Thur Oct 11 @ 6 pm

- B. **PCRaster** tutorial & assignments tentative due date: **Thur Oct 25 @ 6 pm**

- C. **MAPINFO 6.5** tutorial & assignment tentative due date: **Thur Nov 15 @ 6 pm**

- D. **ArcGIS 8.1** tutorial and a two-part assignment

<u>Item</u>	<u>Due Date</u>
Part I ArcView 8.1	Thur Nov 29 @ 6 pm
Part II ArcInfo 8.1	Thur Dec 20 @ 6 pm